

# MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY

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#### University Examinations 2013/2014

# SECOND YEAR, FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN PUBLIC HEALTH

## **IPH 2208: MEDICAL MICROBIOLOGY**

#### DATE: DECEMBER 2013

TIME: 2 HOURS

**INSTRUCTIONS:** Answer question one and any other two questions

### **QUESTION ONE – 30 MARKS**

a.	Enumerate five pathogenic strains of Escherichia coli.	(2 <sup>1</sup> / <sub>2</sub> Marks)	
b.	Outline morphological classification of bacteria.	(2 <sup>1</sup> / <sub>2</sub> Marks)	
c.	As a public health officer, how would you prevent cases of human infections with anthrax.		
		(4 Marks)	
d.	Explain the aetiology of leprosy.	(1 Mark)	
e.	Define the term virulence.	(1 Mark)	
f.	Differentiate between <i>bacteremia</i> and <i>septicemia</i> .	(2 Marks)	
g.	State two organisms that cause bacterial food poisoning.	(2 Marks)	
h.	Outline the morphological classification of fungi.	(3 Marks)	
i.	State four antibacterial agents that prevent bacterial protein synthesis.	(2 Marks)	
j.	How would you perform QA and QC of antibiotics?	(4 Marks)	
k.	Differentiate between a true pathogen and an opportunistic pathogen.	(1 Mark)	
QUESTION TWO – 20 MARKS			
a.	Discuss antiviral agents.	(15 Marks)	
b.	Explain how pathogenic bacteria acquire resistance.	(5 Marks)	
QUESTION THREE – 20 MARKS			
a.	Discuss different types of laboratory media for cultivation of bacteria.	(18 Marks)	
b.	State two methods for determination of bacterial drug sensitivity.	(1 Mark)	
c.	Define the term allergen?	(1 Mark)	

# **QUESTION FOUR - 20 MARKS**

a.	Describe T.B chemotherapy.	(5 Marks)
b.	Define extra pulmonary tuberculosis and list four forms of extra pulmonary tuberculo	osis.
		(5 Marks)
c.	Discuss sterilization.	(8 Marks)
d.	Enumerate four examples of systemic mycosis. (2 Marks)	